

REMARKS

Claims 25-44 and 46-59 are currently pending in the subject application and are presently under consideration. Claims 25, 48 and 58 have been amended as shown on pp. 2, 5 and 7 of the Reply.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 25-44, 46 and 47 Under 35 U.S.C. §101

Claims 25-44, 46 and 47 stand rejected under 35 U.S.C. §101 because no useful, concrete and tangible result is found. This rejection should be withdrawn for at least the following reasons. Claims 26-44, 46 and 47 depend on independent claim 25, which produces a useful, concrete and tangible result.

Because the claimed process applies the Boolean principle [abstract idea] *to produce a useful, concrete, tangible result* ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed. Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been *reduced to some practical application rendering it "useful."* *AT&T* at 1357 citing *In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (emphasis added).

The Examiner contends that the computer-implemented system recited in claim 25 would describe a system that is implemented in some manner with a computer program, which may be construed as a computer program, per se, and is not statutory subject matter. Applicants' representative disagrees and submits the Examiner is misconstruing the requirements necessary to fulfill the conditions for patentability under 35 U.S.C. §101. According to *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999), the standard set forth by the Federal Circuit for determining whether claims are directed towards statutory subject matter is whether the claims as a whole can be applied in a practical application to *produce a useful*.

concrete and tangible result. In particular, claim 25 recites: *the attribute value predictor determining a set of values for each unknown attribute*, wherein such system components are implemented by a computer. This is clearly a useful, concrete and tangible result.

Additionally, the Court of Appeals for the Federal Circuit stated in *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005):

Title 35, section 101, explains that an invention includes "any new and useful process, machine, manufacture or composition of matter." ... Without question, *software code alone qualifies as an invention eligible for patenting under these categories*, at least as processes. *Id.* at 1338 (emphasis added).

The Federal Circuit in *Eolas Techs., Inc. v. Microsoft Corp.* established that software code alone is statutory subject matter. Independent claim 25 recites a *computer implemented ... system* that executes software code comprising a personality type generator and an attribute value predictor to determine unknown attributes relating to a user. A system by itself is statutory subject matter. By the standards set forth in the above decision, a computer implemented system in the form of software, hardware, or the combination of both clearly falls within the categories of statutory subject matter.

In view of the above, it is readily apparent that the claimed invention as recited in independent claims 25 (and associated dependent claims 26-44, 46 and 47) reduces to a practical application that produces a useful, concrete, tangible result; therefore, the subject claims are directed to statutory subject matter pursuant to 35 U.S.C. §101. Accordingly, this rejection should be withdrawn.

II. Rejection of Claims 25-34, 36-44, 46-55 and 57-59 Under 35 U.S.C. §102(b)

Claims 25-34, 36-44, 46-55 and 57-59 stand rejected under 35 U.S.C. §102(b) as being anticipated by Robinson (US 5,884,282). This rejection should be withdrawn for at least the following reasons. Robinson does not disclose or suggest each and every aspect set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it *expressly or inherently describes each and every limitation set forth in the patent claim*. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63

USPQ2d 1597 (Fed. Cir. 2002); See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The *identical invention must be shown in as complete detail as is contained in the ... claim*. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Applicants' claimed subject matter relates to a system to predict and selectively collect preferences based on a user's personality. Independent claims 25, 48 and 58 recite similar aspects, particularly, ***predicting a set of values for each unknown attribute from the probabilities determined for each personality type***. Robinson fails to teach or suggest the above mentioned novel aspects.

Robinson merely relates to an automated collaborative filtering system that recommends an item to a first user based on similarity in preference with the second user. The system determines similarity values for the first user as compared with other users that have provided ratings for items the first user has rated. Based on this similarity a subgroup of users is provided to provide a recommendation. The system compares each item rating of the first user to that of every other user in the database to determine this subgroup. This method is clearly an example of memory-based collaborative filtering wherein known attributes of a new user are compared with known attributes of other users to predict values of attributes with unknown values of the new user. Each predicted attribute requires a computation using the data from across the entire database and this approach is computationally expensive with respect to time and space.

Applicants' claimed subject matter, in contrast, discloses a system wherein a set of values are predicted for each unknown attribute for a new user by employing a personality diagnosis technique. The system determines the new user's personality type employing a vector of "true" ratings and determines a set of probabilities for a user to have a particular personality type. Furthermore, an attribute value predictor can determine a set of possible values for a valueless attribute of the new user. Robinson is silent with regard to this novel feature. Robinson merely compares known ratings for items for a new user with those of every other user in the database and selects a random percentage of people to form a subgroup that can recommend an item to the new user. However, Robinson fails to recite determination of a set of values for each unknown attribute.

In view of at least the foregoing, it is readily apparent that Robinson does not anticipate or suggest the subject invention as recited in claims 25, 48 and 58 (and claims 26-34, 36-44, 46-47, 49-55, 57 and 59 that depend there from). Accordingly, it is respectfully requested that this rejection be withdrawn.

III. Rejection of Claims 35 and 36 Under 35 U.S.C. §103(a)

Claims 35 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Robinson(US 5,884,282) in view of Knight, et al. (US 6,571,234). This rejection should be withdrawn for at least the following reasons. Robinson either alone or in combination with Knight *et al.*, does not teach or suggest every feature of the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (emphasis added).

Applicants' claimed subject matter relates to a system that predicts a set of values for an unknown attribute related to a new user employing collaborative filtering. Claims 35 and 36 depend on independent claim 25. As discussed above, Robinson does not disclose or suggest each and every aspect of the subject claims. In particular, Robinson fails to mention ***generation of a set of values for each unknown attribute***. Knight *et al.* merely relates to a system and method for managing an online message board employing a pruning feature and fails to make up for the aforementioned deficiencies with respect to independent claim 25. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP293USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROC & CALVIN, LLP

/Himanshu S. Amin/

Himanshu S. Amin

Reg. No. 40,894

AMIN, TUROC & CALVIN, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731